

# 2011 NORTH CAROLINA FOR-HIRE SURVEY

## DATA COLLECTION FOR RECREATIONAL FISHERIES

North Carolina Department of Environment and Natural Resources

Division of Marine Fisheries

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## **EXECUTIVE SUMMARY**

The FHS was implemented for all Atlantic Coast states from Maine through Georgia in January 2005 to gather information on fishing effort (number of angler trips) and catch by marine recreational anglers fishing on for-hire (charter boat and headboat) vessels. There were 9,993 call attempts made to vessel representatives in 2011. Reporting rates were stable during 2011, with an overall rate of 80.9%. Charter boat angler effort increased steadily from 5,174 angler trips in wave 1 to 80,887 in wave 4. This is due to a seasonal decrease in fishing activity in charter mode during waves 6 through 2. The Marine Recreational Information Program (MRIP) has determined that for-hire fisheries should be considered as commercial entities. Further MRIP recommendations include developing logbook reporting programs for the for-hire sector. These recommendations are currently being tested. Until these evaluations are complete NCDMF recommends continuing the present program.

## **INTRODUCTION**

The National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (NOAA Fisheries) is required to conduct surveys of marine recreational fishing. The For-Hire Survey (FHS) specifically gathers information on fishing effort (number of angler trips) and catch by marine recreational anglers fishing on for-hire (charter boat and headboat) vessels.

Catch, effort, and participation statistics are fundamental for assessing the influence of fishing on any stock of fish. The quantities taken, the fishing effort, and the seasonal and geographical distribution of the catch and effort are required for the development of rational management policies and plans. Recreational fisheries data are essential for NOAA Fisheries, the Regional Fishery Management Councils, the Interstate Fisheries Commissions, State resource management agencies, recreational fishing industries, and others involved in the management and productivity of marine fisheries. The allocation of many fishery resources depends on the results of these surveys.

The FHS was developed to resolve undercoverage of charter and headboat angler effort by the Coastal Household Telephone Survey (CHTS). The CHTS does not capture the majority of for-hire angling effort in most states because most anglers who take trips on charter and head boats do not live in coastal counties. A series of pilot studies to obtain fishing effort information directly from charter boat operators was conducted in North Carolina and Maine, then throughout the Gulf of Mexico. After several years of testing, the FHS was implemented as the preferred methodology for obtaining Gulf of Mexico for-hire vessel effort in January, 2000. The FHS design was then pilot tested with a logbook program and the CHTS in South Carolina in 2000 and included headboats as well as charter boats. The FHS was implemented for all Atlantic Coast states from Maine through Georgia in January 2005. The For-Hire Survey collects fishing effort data, including numbers of trips and passengers taken in a given week, catch data, and validation data through dockside observations to correct for reporting errors.

The FHS consists of two independent yet complementary surveys. They include a vessel-directory telephone survey to assess fishing effort, and an access-point intercept survey to assess catch per-unit of effort. Data from the two surveys are combined to estimate total fishing effort and catch by species. The work specified in this annual report is for conduct of the telephone survey portion of the FHS as performed by the North Carolina Division of Marine Fisheries (NCDMF).

## **SAMPLING DESIGN**

### **Sampling Frame**

The sampling unit for the FHS is a for-hire vessel. The sample frame in North Carolina was constructed from a comprehensive directory of for-hire boats. The vessel directory consisted of a vessel identifier (vessel name or registration number), the name, address and telephone number of an identified vessel representative (captain or owner), as well as a variety of accessory information, such as eligibility, activity, and cooperation status (Appendix B provides complete variable descriptions for the vessel directory). An updated for-hire vessel directory was provided to NOAA Fisheries every two months (wave).

The sample frame consisted of all vessels active in the for-hire fishery. Information for each for-hire vessel included complete contact information, including a vessel identifier (either vessel name or number), at least one telephone number for a vessel representative, and the county and state in which the vessel operates. Vessels that did not meet these criteria remained in the vessel directory, but were not included in the sample frame. Periodically, contact information for these vessels could potentially become available through dockside interaction or some other means. In addition, new vessels were identified from license files, advertisements, field contacts, etc. The NCDMF was responsible for updating the vessel directory with new information, as well as documenting all changes and updates prior to sample selection. Such updates included information concerning the eligibility, activity, and cooperation status of vessels. If a representative indicated that a vessel never participates in for-hire fishing, that vessel was coded as ineligible such that it would not be included in future sampling frames. If a representative indicated that a vessel was inactive (out of season, being fixed, etc.), the vessel was coded as such, and the wave and month in which activity would resume was recorded. Inactive vessels were not included in the sampling frame. Participation in the FHS in North Carolina is required by law, unlike many other states. Any vessels refusing to report were subject to legal action up to and including the revocation of the participants fishing licenses. This encourages compliance and participation.

## **Sample Selection and Size**

Sampling was stratified by vessel type (headboat and charter/guide boat), state, and week, within two-month sampling periods (waves). The sample frame was created prior to the start of each wave, and sample drawn for all weeks within the wave (i.e. sample is drawn for all weeks within a wave prior to the start of each wave). In preparation for the sample draw, the frame was sorted by permit category, county and descending vessel length category. After randomly sorting vessels within each permit, county, and vessel length category, the frame was sampled by identifying a random start point and selecting every *n*th vessel.

All outputs from the sample draw program were delivered NCDMF at least three weeks prior to the start of each wave. Appendix B provides variable descriptions and naming conventions for the sample frame and sample draw files.

Vessels were sampled at a rate of 10% (rounded to next highest whole number) within each stratum, with a minimum sample size of three vessels.

## **Data Collection Procedures**

### Data Collection Frequency

For-hire participants were contacted on a weekly basis during all weeks within each wave. A week is defined as Monday through Sunday. All weekly dialing was completed during the week following a specified week of fishing (Monday-Sunday). Respondents were asked to report angler and vessel fishing activity for the prior week that ended on a Sunday. This approach resulted in a recall period of 7-14 days for all respondents.

### Vessel Notification

An advance, or warm-up, letter was mailed to the representative of each selected vessel one week prior to the week for which the vessel is selected to report (sample week). The letter notified the representative of the vessel's selection for the survey, the week for which he or she

will be asked to provide data, and the week in which the interview was scheduled to take place. Representatives were also provided with web, fax and phone contact information, as well as instructions for completing the survey through alternative reporting modes. A letter-size logsheet with the basic survey questions was included with the mailing. An example of the advance letter is included in Appendix C. All advance materials were provided by the NCDMF.

### Dialing Procedures

Once a vessel was selected at least ten attempts were made to contact that vessel's representative. Telephone calls were made during the time of day that maximized the potential to contact vessel operators. Interviewers continued to attempt to contact vessel representatives until they conducted an interview, determined that the boat is no longer operating, or made ten attempts. No calls were attempted after 9:00 PM (local time). Once a vessel representative was contacted, future calls to that individual were made on an appointment basis if possible. The NCDMF documented the results of each attempt for each sampled vessel.

### Alternate Reporting Options

To maximize response rates participants were offered alternative reporting options. Vessel representatives were permitted to fax completed logsheets (letter-size, included with notification materials) to a fax line which is maintained by the NCDMF (Appendix C). If a logsheet was accepted as complete for a sampled vessel, further attempts to contact the vessel were discontinued for that sample week. Every effort was made to avoid re-contact of a vessel once it reported via fax.

Vessel representatives also had the option of submitting data via an online tool developed specifically for the FHS. The tool is PIN protected through a unique sample identification number, assigned once the draw has been completed for that wave, and included in the advance mailing. Near real-time sample monitoring is required with this option, so that attempts to contact a vessel representative by telephone are discontinued following completion of an online survey. Every effort is made to avoid re-contact of a vessel once they have reported via the web.

### Survey Instrument

All questionnaires were made available to and approved by NOAA Fisheries. No modifications were made to the survey instrument through the report periods. The current FHS questionnaire is included in Appendix C.

### Data Collection Staff

The NCDMF conducted all hiring, training, and supervising of persons to serve as interviewers for the FHS. All calls were made by experienced telephone interviewers trained and supervised by the NCDMF. The NCDMF used a small core set of interviewers to conduct the FHS. Many vessel operators were called repeatedly throughout the year and perhaps even within a wave, depending upon the size of the fleet in a particular wave. Having the same interviewer conduct repeated contacts with an individual establishes a rapport with respondents, and familiarity with those captain's operations helped the interviews flow more smoothly and take less time.

### Data Entry, Editing, and Quality Control

The NCDMF used the Call-Attempt Log Reporting Tool and Web-Tool provided by NOAA for data entry. These datasets were managed by Quantech Services, Inc. The NCDMF was responsible for delivering error free data on the specified delivery date. Error free data is defined as data that passes through NOAA Fisheries quality assurance program with no errors detected. Error checking reports are provided by Quantech Services, Inc. When errors were detected NCDMF examined the questionable records identified and took the appropriate measures for correcting the error. In addition, FHS results were examined during periodic data review meetings. If additional errors were identified they were resolved in a manner consistent with established procedures.

Those records questioned, and corrected or verified, were reported to NOAA Fisheries on spreadsheets listing the key information to identify the record (vessel id) and the value questioned, the resolved or corrected value, and the reason for the correction. This documentation was included with each wave's deliverables. When errors were found during data review meetings, the NCDMF was responsible for correcting the data within one month of the end of the meeting.

### Pre-validations

NCDMF interviewers verified a subsample of the fishing status of vessels selected for sampling each week. When possible, vessels were validated multiple times during the selected week. These validations were used to create a correction factor for under- and over-reporting of fishing activity.

## **RESULTS**

### **Responses, Call-attempts, and Dialing Results**

The FHS survey in Wave 1 in North Carolina is not fully supported by NOAA. Any information recorded in the tables included in this report for Wave 1 and 6 is collected directly from the FHS vessel directory and is preliminary data. Wave 1 and 6 dialing and reporting results will not be discussed in this report.

Total sample frame sizes by wave are provided in Table 1.

FHS vessel representatives that report (those who are successfully contacted on the telephone or participated in the FHS through alternate reporting options) are considered respondents. Vessel representatives that do not report, either due to an inability to contact or refusal to report, are considered non-respondents. There were two refusals in North Carolina in 2011. There were 9,993 call attempts made to vessel representatives in 2011 (Table 1). Reporting rates were stable during 2011, with an overall rate of 80.9%. There were no inactive eligible vessels in 2011. Non-reporting rates were stable with a rate of 19.1% for 2011 (Table 2). NCDMF telephone interviewers are required to attempt to contact each vessel representative at least 10 times before the respondent can be coded as "unable to contact". Of these non-respondents 45.6% were unable to contact due to wrong or incomplete contact information. The other 54.4% were unable to contact due to no response after 10 calling attempts (answering machine, line



busy, respondent not available, no answer, etc. (Table 2).

Telephone reporting was the most used reporting method throughout the year representing 99.9% of the successful contacts (Table 3). The other 0.1% were from the web-tool.

The number of vessels and their status in the vessel directory varies from wave to wave. The number of vessels ineligible for participation in the North Carolina FHS during 2011 ranged from 906 during wave 1 to a maximum of 967 vessels in wave 6 (Table 4).

For each record on the FHS data there is an appropriate status and result code. Status codes indicate the final disposition of an FHS-selected vessel. Either an interview was completed for an active eligible vessel, the vessel was inactive or ineligible, the vessel representative refused to participate, the telephone number was bad, or NCDMF interviewers were unable to contact the vessel representative. Reaching an answering machine or non-working number were the primary reason for failed calls (Table 5).

In accordance with established sampling procedures, some vessel representatives were not called due to a previous week's call attempt final result (e.g. inactive vessels). Additionally, a vessel representative might not have been called if their fax or Internet submission was received prior to the first attempt. More successful captain contacts occurred during wave 5 (490) than in any another time period (Table 6).

More for-hire vessel trips were reported in charter mode (1,765) than headboat mode (363) during 2011. However, this refers to the number of vessel trips and is not an estimate of effort at the angler level. The majority of charter vessel trips were reported in the ocean (72.4%), followed by the Pamlico/Albemarle Estuary (14.8%), sounds (10.5%) and rivers, and other waterbodies (2.6%). Less than one percent of trips were reported in bays. The majority of headboat vessel trips were reported in the ocean (79.4%), followed by the Pamlico/Albemarle Estuary (20.6%). No headboat trips were reported in, sounds, rivers, bays, or other waterbodies (Table 7). For-hire vessel trips took place predominately on Mondays, Saturdays and Tuesday (Table 8).

Each wave NCDMF received error reports from NOAA Fisheries (Table 10). All errors were investigated and corrected by NCDMF staff.

### **Angler Effort**

Charter angler effort increased steadily from 5,174 angler trips in wave 1 to 80,887 in wave 4, and decreased to 4,764 in wave 6. This is due to a seasonal decrease in fishing activity during waves 1, 2 and 6 (Table 11). Beginning in 2011 the catch and effort estimates in the head boat mode in the Southeast Region were discontinued. The Southeast Region Headboat Survey Program now provides that information.

## **DISCUSSION**

Results indicate that a total of 15.7% of all charter trips reported in 2011 were taken in sounds, rivers, and other internal waterbodies. However, anecdotal evidence indicates significant activity by guideboats in North Carolina. These guideboats hold between two and four anglers, fish inland waters, and often launch at private boat sites. These vessels are part of the FHS sampling frame, however make up a smaller portion of the charter fleet making complementary

dockside sampling difficult and unpredictable. Mixed mode sampling is not allowed in the angler intercept portion of the survey, therefore catch rates represent a disproportionate level of guideboat activity.

While there were seven recorded refusals in North Carolina in 2011, under- and over-reporting of vessel trips is still a concern. 18.9% of the sample frame is recorded as non-respondent due to an inability to contact the vessel representative. It is difficult to estimate the number of “passive” refusals (e.g. those representatives that screen calls for DMF interviewers, purposely record false contact information, etc.) or the number of vessels deliberately under- or over-reporting fishing activity due to a low percentage of vessel validations (37.1%). Any errors in recall of fishing activity by the vessel representative can also lead to a false correction. It is therefore critical to continue the vessel validation program that identifies under and over reporting and provides a trip adjustment factor.

The FHS has proven to provide much more precise estimates of for-hire effort and discard data, especially in the charterboat and headboat fisheries than the CHTS. The direct contact with vessel representatives allows NCDMF samplers to develop much more personal relationships with these individuals. These relationships lead to the exchange of information that can be shared with NCDMF management staff. In some cases it also results in increased ownership in NCDMF management strategies.

The Marine Recreational Information Program (MRIP), a national program sponsored by NOAA Fisheries and tasked with the responsibility of improving recreational fishing catch and effort data, has determined that for-hire fisheries should be considered as commercial entities and considered differently than other types of recreational fishing. In this regard, further MRIP recommendations include developing logbook reporting programs for the for-hire sector. Pilot programs evaluating the benefits of mandatory logbook reporting are currently being tested in the Gulf States and selected headboats in the South Atlantic. The new reporting strategy may or may not result in improvements in the quality of for-hire fishing information. If the pilot logbook reporting projects are found to provide better data by which to represent these fisheries it will most likely be adopted as the preferred method. Until these evaluations are complete NCDMF recommends continuing the present program.

Table 1: Sample frame size and call attempts by wave during 2011.<sup>i</sup>

Wave	Sample Frame Size		Call Attempts	
		N		N
	1	648		1,189
	2	720		1,601
	3	738		1,990
	4	648		1,604
	5	720		1,763
	6	720		1,846
Total		4,194		9,993

Table 2: Respondents, non-respondents, and contact attempts for for-hire vessels sampled by wave during 2011.<sup>i</sup>

Wave	Respondents								Non-Respondents							
	Active eligible		Inactive eligible		Ineligible		All		Refusal		Not able to contact		All		Contact attempts	All
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	Means	N
1	335	8.0	-	-	221	5.3	556	13.3	1	0.02	91	2.2	92	2.2	1.8	648
2	444	10.6	-	-	149	3.6	593	14.1	2	0.05	125	3.0	127	3.0	2.2	720
3	441	10.5	-	-	145	3.5	586	14.0	4	0.10	148	3.5	152	3.6	2.7	738
4	402	9.6	-	-	95	2.3	497	11.9	0	0	151	3.6	151	3.6	2.5	648
5	490	11.7	-	-	91	2.2	581	13.9	0	0	139	3.3	139	3.3	2.4	720
6	415	9.9	-	-	166	4.0	581	13.9	0	0	139	3.3	139	3.3	2.6	720
Total	2,527	60.3	-	-	867	20.7	3,394	80.9	7	0.17	793	18.9	800	19.1	2.4	4,194

Table 3: Vessel reporting type (number and percent) by wave during 2011.<sup>i</sup>

Wave	Reporting Type								All N
	Log sheet		Telephone		VTR		Web-tool		
	N	%	N	%	N	%	N	%	
1	-	-	648	100.0	-	-	-	-	648
2	-	-	719	99.9	-	-	1	0.1	720
3	-	-	738	100.0	-	-	-	-	738
4	-	-	647	99.8	-	-	1	0.2	648
5	-	-	720	100.0	-	-	-	-	720
6	-	-	719	99.9	-	-	1	0.1	720
Total	-	-	4,191	99.9	-	-	3	0.1	4,194

Table 4: Vessel directory information by wave during 2011.<sup>i</sup>

Wave	Good List Vessels	Inactive Vessels	Bad List Vessels - No vessel ID	Bad List Vessels - No phone	Bad List Vessels - No county	Ineligible	All Vessels
1	441	-	4	81	64	906	1,496
2	919	113	4	76	60	907	2,079
3	923	112	4	77	48	918	2,082
4	950	155	2	95	58	910	2,170
5	939	171	2	101	58	938	2,209
6	940	168	2	101	62	967	2,240

Table 5: Distribution of interview variables by wave during 2011: status codes by dialing result. <sup>i</sup>

		Dialing Result								
		Answering Machine or Service	Line Busy	Not available	Not in service/wrong number	Refusal	Successful Contact		All	
Wave	Status	N	N	N	N	N	N	N	N	%
1	Complete interview	-	-	-	-	-	335	335	51.7	
	Refusal	-	-	-	-	1	-	1	0.15	
	Ineligible	-	-	-	-	-	221	221	34.1	
	Unable to contact	27	-	1	63	-	-	91	14.04	
	All	27	-	1	63	1	556	648	100	
2	Complete interview	-	-	-	-	-	444	444	61.67	
	Refusal	-	-	-	-	2	-	2	0.28	
	Ineligible	-	-	-	-	-	149	149	20.69	
	Unable to contact	58	-	-	67	-	-	125	17.36	
	All	58	-	-	67	2	593	720	100	
3	Complete interview	-	-	-	-	-	441	441	59.76	
	Refusal	-	-	-	-	4	-	4	0.54	
	Ineligible	-	-	-	-	-	145	145	19.65	
	Unable to contact	79	-	2	67	-	-	148	20.05	
	All	79	-	2	67	4	586	738	100	
4	Complete interview	-	-	-	-	-	402	402	62.04	
	Ineligible	-	-	-	-	-	95	95	14.66	
	Unable to contact	63	-	21	67	-	-	151	23.3	
	All	63	-	21	67	-	497	648	100	
5	Complete interview	-	-	-	-	-	490	490	68.06	
	Ineligible	-	-	-	-	-	91	91	12.64	
	Unable to contact	78	1	2	58	-	-	139	19.31	
	All	78	1	2	58	-	581	720	100	

Table 5 (Continued): Distribution of interview variables by wave during 2011: status codes by dialing result. <sup>i</sup>

		Dialing Result							
Wave	Status	Answering Machine or Service	Line Busy	Not available	Not in service/wrong number	Refusal	Successful Contact		All
		N	N	N	N	N	N	N	%
6	Complete interview	-	-	-	-	-	415	415	57.64
	Ineligible	-	-	-	-	-	166	166	23.06
	Unable to contact	96	-	3	40	-	-	139	19.31
	All	96	-	3	40	-	581	720	100
All	Complete interview	-	-	-	-	-	2527	2527	60.25
	Refusal	-	-	-	-	7	-	7	0.17
	Ineligible	-	-	-	-	-	867	867	20.67
	Unable to contact	401	1	29	362	-	-	793	18.91
	All	401	1	29	362	7	3394	4194	100

Table 6: Distribution of interview variables by wave during 2011: call attempts by dialing result. <sup>i</sup>

Wave	Attempts	Dialing Result								All	
		Line Busy	No Answer	Answering Machine or Service	Not available	Not in service/wrong number	Refusal	Ineligible	Complete Interview		
		N	N	N	N	N	N	N	N	N	%
1	1	-	-	-	-	47	1	196	242	486	75
	2	-	-	-	1	7	-	13	40	61	9.41
	3	-	-	-	-	2	-	2	25	29	4.48
	4	-	-	-	-	2	-	6	17	25	3.86
	5	-	-	-	-	2	-	2	4	8	1.23
	6	-	-	-	-	1	-	2	3	6	0.93
	7	-	-	-	-	-	-	-	3	3	0.46
	8	-	-	-	-	-	-	-	1	1	0.15
	9	-	-	-	-	1	-	-	-	1	0.15
	10	-	-	27	-	1	-	-	-	28	4.32
	All	-	-	27	1	63	1	221	335	648	100
2	1	-	-	-	-	52	2	141	317	512	71.11
	2	-	-	-	-	10	-	5	50	65	9.03
	3	-	-	-	-	-	-	-	31	31	4.31
	4	-	-	-	-	3	-	2	22	27	3.75
	5	-	-	-	-	-	-	-	9	9	1.25
	6	-	-	-	-	-	-	-	5	5	0.69
	7	-	-	-	-	1	-	-	4	5	0.69
	8	-	-	-	-	1	-	1	4	6	0.83
	10	-	-	58	-	-	-	-	2	60	8.33
	All	-	-	58	-	67	2	149	444	720	100
3	1	-	-	-	1	58	3	131	267	460	62.33
	2	-	-	-	1	4	-	9	61	75	10.16
	3	-	-	-	-	2	-	2	38	42	5.69
	4	-	-	-	-	1	1	1	31	34	4.61
	5	-	-	-	-	-	-	1	14	15	2.03
	6	-	-	-	-	1	-	-	8	9	1.22
	7	-	-	-	-	-	-	-	9	9	1.22
	8	-	-	-	-	-	-	1	4	5	0.68
	9	-	-	-	-	-	-	-	4	4	0.54
	10	-	-	79	-	1	-	-	5	85	11.52
	All	-	-	79	2	67	4	145	441	738	100

Table 6 (Continued): Distribution of interview variables by wave during 2011: call attempts by dialing result. <sup>i</sup>

4	1	-	-	-	21	56	-	85	267	429	66.2
	2	-	-	-	-	8	-	3	46	57	8.8
	3	-	-	-	-	2	-	1	38	41	6.33
	4	-	-	-	-	-	-	1	31	32	4.94
	5	-	-	-	-	-	-	1	6	7	1.08
	6	-	-	-	-	1	-	1	4	6	0.93
	7	-	-	-	-	-	-	1	3	4	0.62
	8	-	-	-	-	-	-	1	2	3	0.46
	9	-	-	-	-	-	-	-	3	3	0.46
	10	-	-	63	-	-	-	1	2	66	10.19
5	All	-	-	63	21	67	-	95	402	648	100
	1	-	-	-	2	56	-	83	364	505	70.14
	2	-	-	-	-	2	-	6	53	61	8.47
	3	-	-	-	-	-	-	1	33	34	4.72
	4	-	-	-	-	-	-	-	17	17	2.36
	5	-	-	-	-	-	-	-	4	4	0.56
	6	-	-	-	-	-	-	-	3	3	0.42
	7	-	-	-	-	-	-	-	7	7	0.97
	8	-	-	-	-	-	-	1	3	4	0.56
	9	-	-	-	-	-	-	-	3	3	0.42
6	10	1	-	78	-	-	-	-	3	82	11.39
	All	1	-	78	2	58	-	91	490	720	100
	1	-	-	-	3	38	-	151	319	511	70.97
	2	-	-	-	-	1	-	10	47	58	8.06
	3	-	-	-	-	1	-	1	24	26	3.61
	4	-	-	-	-	-	-	2	4	6	0.83
	5	-	-	-	-	-	-	-	7	7	0.97
	6	-	-	-	-	-	-	1	4	5	0.69
	7	-	-	-	-	-	-	-	4	4	0.56
	8	-	-	-	-	-	-	-	3	3	0.42
	10	-	-	96	-	-	-	1	3	100	13.89
	All	-	-	96	3	40	-	166	415	720	100



Table 6 (Continued): Distribution of interview variables by wave during 2011: call attempts by dialing result. <sup>i</sup>

Total	1	-	-	-	27	307	6	787	2,563	2,903	69.2
	2	-	-	-	2	32	-	46	343	377	9.0
	3	-	-	-	-	7	-	7	196	203	4.8
	4	-	-	-	-	6	1	12	134	141	3.4
	5	-	-	-	-	2	-	4	48	50	1.2
	6	-	-	-	-	3	-	4	31	34	0.8
	7	-	-	-	-	1	-	1	31	32	0.8
	8	-	-	-	-	1	-	4	21	22	0.5
	9	-	-	-	-	1	-	-	10	11	0.3
	10	1	-	401	-	2	-	2	17	421	10.0
All	1	-	401	29	362	7	867	3,394	4,194	100.0	

Table 7: Vessel type by wave and area fished during 2011.<sup>i</sup>

Wave	Vessel Type	Area fished						
		Ocean, gulf or open bay	Sound	River	Enclosed bay	Other	Chesapeake Estuary	Pamlico/ Albemarle Estuary
1	Charter	33	1	-	3	-	-	3
	Headboat	3	-	-	-	-	-	-
2	Charter	49	13	1	1	2	1	4
	Headboat	6	-	-	-	-	-	-
3	Charter	152	16	1	-	6	-	9
	Headboat	20	-	-	-	-	-	6
4	Charter	120	18	-	-	7	-	29
	Headboat	10	-	-	-	-	-	5
5	Charter	82	16	10	-	2	-	14
	Headboat	12	-	-	-	-	-	4
6	Charter	32	4	5	-	-	2	10
	Headboat	7	-	-	-	-	-	-
Total	Charter	468	68	17	4	17	3	69
	Headboat	58	-	-	-	-	-	15

Table8: Vessel type by wave and day of trip during 2011.<sup>i</sup>

Wave	Vessel Type	Day of Trip						
		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1	Charter	8	5	3	7	5	15	3
	Headboat	-	-	-	-	-	3	-
2	Charter	11	8	11	7	13	13	13
	Headboat	1	2	-	1	1	1	-
3	Charter	60	27	21	26	20	41	19
	Headboat	10	8	2	2	-	3	2
4	Charter	60	55	23	14	14	16	9
	Headboat	6	6	2	-	-	-	1
5	Charter	19	17	13	16	15	37	12
	Headboat	4	3	2	-	1	5	1
6	Charter	9	5	6	3	7	19	5
	Headboat	-	1	2	1	-	2	1
Total	Charter	167	117	77	73	74	141	61
	Headboat	21	20	8	4	2	14	5

Table 9: Vessel Validations by wave during 2011.<sup>i</sup>

Wave	Sample Frame	Vessels Validated		Vessels Not Validated	
	N	N	%	N	%
1	648	224	34.6	424	65.4
2	720	282	39.2	438	60.8
3	738	257	34.8	481	65.2
4	648	253	39.0	395	61.0
5	720	290	40.3	430	59.7
6	720	248	34.4	472	65.6
All	4,194	1,554	37.1	2,640	62.9

Table 10: Sample frame and recording errors by wave during 2011.<sup>i</sup>

Wave	Sample Frame		Errors	
		N		N
	1	648		8
	2	720		15
	3	738		10
	4	648		1
	5	720		6
	6	720		4
All		4,194		44

<sup>i</sup> Any information recorded in the tables included in this report for Wave 1 and 6 is collected directly from the FHS vessel directory and is preliminary data.

Table 11: Angler effort (trips) by wave and for charter boats during 2011.<sup>ii</sup>

Wave	Trip Type	Angler Trips			Wave	Trip Type	Angler Trips		
		N	%	PSE			N	%	PSE
1	Charter (Ocean <= 3 MI)	3,548	68.6	24.9	4	Charter (Ocean <= 3 MI)	15,686	19.4	19.9
	Charter (Ocean > 3 MI)	1,053	20.4	31.3		Charter (Ocean > 3 MI)	49,867	61.7	26.5
	Charter (Inland)	573	11.1	42.7		Charter (Inland)	15,334	19.0	18.6
	All	5,174	100.0	18.8		All	80,887	100.0	17.2
2	Charter (Ocean <= 3 MI)	1,457	16.5	37.4	5	Charter (Ocean <= 3 MI)	2,560	13.6	28.6
	Charter (Ocean > 3 MI)	5,925	67.3	19.5		Charter (Ocean > 3 MI)	11,492	60.9	18.6
	Charter (Inland)	1,427	16.2	26.9		Charter (Inland)	4,818	25.5	23.9
	All	8,809	100.0	15.2		All	18,870	100.0	13.5
3	Charter (Ocean <= 3 MI)	13,583	24.8	21.1	6	Charter (Ocean <= 3 MI)	939	19.7	39.1
	Charter (Ocean > 3 MI)	34,949	63.9	12.7		Charter (Ocean > 3 MI)	2,687	56.4	25.4
	Charter (Inland)	6,170	11.3	21.4		Charter (Inland)	1,137	17.9	30.6
	All	54,702	100.0	10		All	4,764	100.0	17.9

<sup>ii</sup> Beginning in 2011 the catch and effort estimates in the head boat mode in the Southeast Region were discontinued. The Southeast Region Headboat Survey Program now provides that information.

## **Appendix A: Glossary**

**Wave:** FHS is structured around two-month sampling periods called "waves."

January-February = Wave 1

March-April = Wave 2

May-June = Wave 3

July-August = Wave 4

September -October = Wave 5

November-December = Wave 6

**Week:** For the FHS, sampling within waves is conducted on a weekly basis. A week is defined as Monday through the following Sunday.

**Ineligible Vessel:** An ineligible vessel is a vessel that does not do any for-hire fishing. Such vessels are not removed from the directory during the survey year. However, they are coded as ineligible in the vessel directory so they will not be included in the sampling frame.

**Inactive Vessel:** An inactive vessel is one that is currently not actively participating in for-hire fishing, but remains a member of the for-hire fleet. For example, most vessels are inactive due to repairs, or the seasonal fishing in their state. Inactive vessels are not included in the sample draw. To determine when to resume calling, we record the month and year of their expected return.

**Non-cooperative Vessel:** A vessel is designated non-cooperative when the designated vessel representative refuses to cooperate with the annual survey effort (e.g. hard refusal – "Take me off your list.") This is not to be used when someone refuses the weekly survey (e.g. "I don't have time right now."). These vessels are still drawn, but not contacted, as prescribed in section 3.1.

## Appendix B: FHS Vessel Directory Variable Descriptions and Formats

### *For-Hire Vessel Directory Variable Descriptions*

File naming convention is as follows: <dir\_w><wave><YY>; e.g. dir\_w407 for 2007, wave 4.

ST	State Code (FIPS Code)
VSL_ID	Vessel ID Number for the Survey
VSL_NUM	Vessel registration number (CG, state registration #, etc.)
VSL_NAME	Name of vessel
ACTIVE	If the vessel is currently participating in the charter boat fishery 'A'=Active 'I'=Inactive
ELIG	If the vessel is an eligible for-hire fishing boat 'Y'=Eligible 'N'=Ineligible
FOR_HIRE	Type of for-hire vessel 'C'=Charter boat; 'H'=Head boat;
BUSICNTY	County from which the for-hire boat operates (NMFS FIPS codes: <st><cnty>) (e.g. marina/dock location, usual launch site, etc.)
COOP_STT	Degree of cooperation of the vessel representative 'Y'=Willing to participate in survey 'N'=Not willing to participate in survey
BST_TIME	Best time to contact the vessel representative to conduct the survey
VSL_LEN	Length (in feet) of vessel - Integer only
LIC_CAP	Licensed capacity of the vessel
PERM_NUM	For-hire permit number (state or federal, if existing)
PERM_CAP	Permitted capacity class (state/agency defined classes)
REP_LST	Last name of the vessel representative (person most likely to know about the fishing activity of the vessel)
REP_1ST	First name of the vessel representative
REP_FON1	Primary phone number of the vessel representative
REP_FON2	2 <sup>nd</sup> phone number of the vessel representative
REP_FON3	3 <sup>rd</sup> phone number of the vessel representative
REP_ADD	Address of the vessel representative
REP_CTY	City of the vessel representative

REP_ST	State of residence of the vessel representative
REP_ZIP	Zip code of the vessel representative
BUSINESS	Name of charter boat business
BUSI_ADD	Physical address for where the charter boat is docked
BUSI_CTY	City where the charter boat is docked
BUSI_ST	State where the charter boat is docked
BUSI_ZIP	Zip code for the charter boat location
COMMENTS	Any comments that might be useful in interpreting the information in the data base
CPT1FON1	First captain's 1 <sup>st</sup> (primary) phone number
CPT1FON2	First captain's 2 <sup>nd</sup> phone number
CPT1FON3	First captain's 3 <sup>rd</sup> phone number
CPT1_LST	First captain's last name
CPT1_1ST	First captain's first name
CPT1_ADD	First captain's address
CPT1_CTY	First captain's city
CPT1_ST	First captain's state of residence
CPT1_ZIP	First captain's zip code
CPT2FON1	Second captain's 1 <sup>st</sup> (primary) phone number
CPT2FON2	Second captain's 2 <sup>nd</sup> phone number
CPT2FON3	Second captain's 3 <sup>rd</sup> phone number
CPT2_LST	Second captain's last name
CPT2_1ST	Second captain's first name
CPT2_ADD	Second captain's address
CPT2_CTY	Second captain's city
CPT2_ST	Second captain's state of residence
CPT2_ZIP	Second captain's zip code
OWNR_1ST	Vessel owner's first name
OWNR_LST	Vessel owner's last name
PORT	Port name of operations for the vessel (marina, ramp, dry storage facility)
VERIFIED	If the information for the vessel is verified 'Y'=Data is verified 'N'=Data is not verified
R_WAVE_N	Wave which the vessel will begin actively participating in the for-hire fishery
R_WAV_MN	Month which the vessel will begin actively participating in the for-hire fishery

R_WAV_YR	Year in which the vessel will begin actively participating in the for-hire fishery
HIN	Hull identification number
GEO_CNTY	For the sample draws to ensure geographical distribution - this variable is assigned by draw program but needs to be in this database.
DATE_NEW	Date which a new vessel was added to the data base (format: YYYYMMDD)
DATE_MOD	Date which information regarding an existing vessel was updated (format: YYYYMMDD)
P_ACCESS:	Primary Type of Access used by Vessel for the Wave '1' = Private Dock '2' = Trailered, Launch Ramp '3' = Private Access Marina '4' = Public Access Marina
INTSITE	Location of Vessel (MRFSS 4-digit access-site code)
EMAIL	Email address of the vessel representative
LPS_VSL	Does the vessel have a permit to fish for Large Pelagic Species? 'Y' = Yes 'N' = No
MD_BOAT	Fishing location for Maryland Vessels 'B' = Chesapeake Bay 'O' = Ocean
PERMITNB	Highly Migratory Species (HMS) permit number
REFCT	Whether or not the vessel refused to participated in the survey
R_ALONG	Whether the vessel allowed observers at sea.
VTR_VSL	Is the vessel required to submit NMFS Vessel Trip Reports? 'Y' = Yes 'N' = No
WEBSITE	Website for Vessel Operation
CHNG_wP	Variables that were changed as a result of telephone survey updates during wave w (one complete year of changes result from telephone survey updates are included in each vessel directory)
CHNG_wF	Variables that were changed as a result of field updates during wave w (one complete year of changes result from field updates are included in each vessel directory)

*For-Hire Vessel Directory Variable Formats*

<b>Variable Name</b>	<b>Char/ Num</b>	<b>Field Length</b>	<b>Variable Description</b>
ST	Char	2	Charter boat vessel state
VSL_ID	Char	7	Vessel identification number
VSL_NUM	Char	9	Vessel registration number
VSL_NAME	Char	35	Name of vessel
ACTIVE	Char	1	If the vessel is currently participating in the charter boat fishery
ELIG	Char	1	If the vessel is an eligible for-hiring fishing boat
FOR_HIRE	Char	1	Type of for-hire vessel
VSL_LEN	Char	8	Length of vessel
BUSICNTY	Char	5	County where the charter boat is docked
COOP_STT	Char	1	Degree of cooperation of the vessel representative
BST_TIME	Char	20	Best time to contact the vessel representative to conduct the survey
LIC_CAP	Char	8	Licensed capacity of the vessel
PERM_CAP	Char	1	Permitted capacity class
PERM_NUM	Char	8	For-hire permit number
REP_LST	Char	25	Last name of the vessel representative
REP_1ST	Char	25	First name of the vessel representative
REP_ADD	Char	35	Address of the vessel representative
REP_CTY	Char	23	City of the vessel representative
REP_ST	Char	2	State of residence of the vessel representative
REP_ZIP	Char	10	Zip code of the vessel representative
REP_FON1	Char	20	Primary phone number of the vessel representative
REP_FON2	Char	20	2 <sup>nd</sup> phone number of the vessel representative
REP_FON3	Char	20	3 <sup>rd</sup> phone number of the vessel representative
BUSINESS	Char	35	Name of charter boat business
BUSI_ADD	Char	35	Physical address for where the charter boat is docked
BUSI_CTY	Char	23	City where the charter boat is docked
BUSI_ST	Char	2	State where the charter boat is docked
BUSI_ZIP	Char	10	Zip code for the charter boat location
COMMENTS	Char	50	Comments - useful in interpreting the information in the data base
CPT1FON1	Char	20	First captain's 1 <sup>st</sup> (primary) phone number



CPT1FON2	Char	20	First captain's 2 <sup>nd</sup> phone number
CPT1FON3	Char	20	First captain's 3 <sup>rd</sup> phone number
CPT1_LST	Char	25	First captain's last name
CPT1_1ST	Char	25	First captain's first name
CPT1_ADD	Char	35	First captain's address
CPT1_CTY	Char	23	First captain's city
CPT1_ST	Char	2	First captain's state of residence
CPT1_ZIP	Char	10	First captain's zip code
CPT2FON1	Char	20	Second captain's 1 <sup>st</sup> (primary) phone number
CPT2FON2	Char	20	Second captain's 2 <sup>nd</sup> phone number
CPT2FON3	Char	20	Second captain's 3 <sup>rd</sup> phone number
CPT2_LST	Char	25	Second captain's last name
CPT2_1ST	Char	25	Second captain's first name
CPT2_ADD	Char	35	Second captain's address
CPT2_CTY	Char	23	Second captain's city
CPT2_ST	Char	2	Second captain's state of residence
CPT2_ZIP	Char	10	Second captain's zip code
OWNR_1ST	Char	25	Vessel owner's first name
OWNR_LST	Char	25	Vessel owner's last name
PORT	Char	23	Port of operations for the vessel
VERIFIED	Char	1	If the information for the vessel is verified
R_WAVE_N	Char	1	Wave in which the vessel will begin participating in the for-hire fishery
R_WAV_MN	Char	2	Month in which the vessel will begin participating in the for-hire fishery
HIN	Char	25	Hull identification number
GEO_CNTY	Char	12	For the sample draws to be distributed geographically
DATE_NEW	Char	8	Date which a new vessel was added to the data base
DATE_MOD	Char	8	Date which information regarding an existing vessel was updated
P_ACCESS	Char	1	Type of access used by vessel for the wave
INTSITE	Char	4	MRFSS Site Code of vessel port
E_MAIL	Char	50	Email address of vessel representative
LPS_VSL	Char	1	Permit to fish for Large Pelagic Fishes
MD_BOAT	Char	1	Maryland vessel fishing location
PERMITNB	Char	8	HMS permit number

REFCT	Num	8	
REFWAVEN	Char	1	Number of waves a vessel will be inactive
R_ALONG	Char	1	
VTR_VSL	Char	1	Requirements for submitting NMFS vessel trip reports
WEBSITE	Char	50	Website of fishing operation
CHNG_WP			Changes resulting from phone survey updates during wave W
CHNG_WF			Changes resulting from field survey updates during wave W

*FHS Sample Frame (Good List) Variable Descriptions and Formats*

File naming convention is as follows: <gd><st><YY><wave>; e.g. gdsc044 for South Carolina, 2004, wave 4.

<b>VARIABLE NAME</b>	<b>FORMAT</b>		<b>DESCRIPTION</b>
BAD_FLG	Num	8	Any bad flags (NO = 0 on all records)
FOR_HIRE	Char	1	C=charterboat, H=head/party boat
GEO_CNTY	Num	8	If geo_cnty specified in register
LIC_CAP	Char	8	Capacity in people licensed for (a number)
LRG	Char	1	Size category within vessel type B=small, C=large, A=unknown
NVSL_LEN	Num	8	Boat length in feet
ST	Char	2	State of survey frame
VSL_ID	Char	7	Unique Vessel Identifier
VSL_NAME	Char	35	Vessel Name
VSL_NUM	Char	25	Vessel Registration Number
VTTYPE	Char	1	Same values as FOR_HIRE

**NOTE:** This file is generated by the sample selection program from the Directory

### *FHS Bad List Variable Descriptions and Formats*

File naming convention is as follows: <bd><st><YY><wave>; e.g. bdsc044 for South Carolina, 2004, wave 4.

<b>VARIABLE NAME</b>	<b>FORMAT</b>		<b>DESCRIPTION</b>
BAD_FLG	Num	8	1=YES, at least 1 key variable missing
FH_FLG	Num	8	For-Hire variable (C/H) missing or out of range
FON_FLG	Num	8	Representative's phone number missing
GEO_CNTY	Num	8	If missing (generated based on coastal county) then out-of-range record
NCST_FLG	Num	8	County of operation is NON-Coastal
ST	Char	2	State of survey Frame
ST_FLG	Num	8	State of operation is missing
VSLIDFLG	Num	8	Both Vessel name and registration number is missing
VSL_ID	Char	7	Unique 7-digit vessel identifier
VSL_NAME	Char	35	Name of vessel
VSL_NUM	Char	25	Registration number of vessel

### *FHS Draw File Variable Descriptions and Formats*

File naming convention is as follows: <st><type><yy><wave><week>; e.g. sc204433 for South Carolina, charterboat (1=head/party; 2=charter), 2004, wave 4, sample week 33.

<b>VARIABLE NAME</b>	<b>FORMAT</b>	<b>DESCRIPTION</b>
ACTIVE	Char 1	Vessel activity status for the wave (A=Active; I=Inactive)
ACTV_FLG	Num 8	Inactive Flag (1=Yes / 0=No; 1=Inactive; 0=Active)
BUSICNTY	Char 5	FIPS coastal county of operation
COOP_STT	Char 1	Cooperating with survey (Y=yes; N=no)
FH_FLG	Num 8	For-Hire value missing or out of range (1=Yes / 0=No)
FON_FLG	Num 8	Representative's phone number missing (1=Yes / 0=No)
FOR_HIRE	Char 1	For-hire vessel category (C=charter / H=Head/Party)
GEO_CNTY	Num 8	Coded value for geographic county of operation - program generated
LRG	Char 1	Boat size category (A=unknown; B=small; C=large - defined in program)
R_WAVE_N	Char 1	Wave in which boat will become Active
R_WAV_MN	Char 2	Month in which boat will become Active
ST	Char 2	State of Vessel Frame/Sample Draw
ST_FLG	Num 8	State of operation missing (1=Yes / 0=No)
VSLIDFLG	Num 8	Vessel name and registration number missing (1=Yes / 0=No)
VSL_ID	Char 7	Unique 7=digit vessel identifier
VSL_LEN	Char 8	Vessel length in feet (no decimal)
VSL_NAME	Char 35	Name of boat
VSL_NUM	Char 25	Registration number of boat.
INTSITE	Char 4	Location of vessel.

## Appendix C: Advance Letter



### Survey Conducted by:



Contact:  
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Kelly.Fitzpatrick@ncdenr.gov  
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### Jointly with:



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Lewis Gillingham, Virginia Marine Resources Commission  
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Week «WEEK»

Dear For-Hire Vessel Owners and Captains:

The For-Hire Survey has been adopted by the state and federal partners of the Atlantic Coast Cooperative Statistics Program (ACCSP) as the official method for collecting recreational catch and effort data. from the for-hire (charter and headboat) fleet. Using a coastwide vessel directory, for-hire vessels are sampled weekly to report trip-level information for the previous week's fishing activity. Catch information will be collected through a dockside/at-sea intercept survey. The North Carolina Division of Marine Fisheries began conducting this survey effective November 1, 2005.

You have been selected to report fishing activity of the «VSL\_NAME» vessel for the week of:

### «DATES»

Beginning on Monday «CALLING» we will attempt to contact you to collect this Information.

The enclosed logsheet can be used to record your trip information during the specified week of fishing. Instructions have been provided to help you fill in the requested information. At the conclusion of the fishing week, you may wait for an interviewer to contact you, or you can fax in your logsheet by Wednesday «FaxDate» using the following fax number: **1-252-946-3967**.

You may also report your trips electronically by logging on to:

forhire.fishingsurvey.com beginning Monday «CALLING»

Use the following PIN

If you have any questions concerning the form or this important survey please call me at (800) 338-7804. Thank you for your cooperation.

Sincerely,  
Kelly Fitzpatrick  
North Carolina Division of Marine Fisheries

Vessel Name «VSL\_NAME»

Vessel Number «VSL\_NUM»

PIN «pin»

Name «REP\_LST»

## Appendix D: For-Hire Survey Questionnaire

Hello, I'm calling on behalf of NOAA Fisheries and the For-Hire Survey. Can I please speak to name of contact? **If person sought is not available, ask if they will be available anytime this week. If yes, scheduled convenient time to call back to talk to that person, thank respondent, and terminate interview. If no, thank respondent and terminate interview.**

Are you still the captain, owner or designated representative of the vessel name?

**If "yes", ask:** Can you provide information on the activity of the vessel name during the last week (Monday through Sunday)?

**If "yes", continue to survey description.**

**If "no", ask:** Is someone else currently operating the name of the vessel?

**If "yes", then ask:** Do you know the name and telephone number of new contact?

If "yes", take name and telephone number, thank respondent and terminate interview.

**If "no", denote whatever information is given and terminate interview.**

The vessel name has been selected at random from a directory of charter and headboats to be included in this week's survey of trips. This data will remain confidential, and this survey is being conducted in accordance with the Privacy Act of 1974, therefore your participation is voluntary. **(Continue with interview.)**

### INTRO TWO: (for previously interviewed vessel reps)

Hello this is [interviewer name] calling on behalf of NOAA Fisheries for the For-Hire Survey. May I speak with [contact name]?

#### Alternate survey description for re-contacts:

The vessel name has been selected for this week's sample and I am calling to collect your effort information for this time period. As you know, this data will remain confidential, and this survey is being conducted in accordance with the Privacy Act of 1974, therefore your participation is voluntary.

**(Continue with interview.)**

Q1 During the last week (Monday through Sunday), how many saltwater fishing trips targeting finfish did the [vessel name] take?

Record –

If Q1=0, go to Q18.

Q2 How many of these trips were with paying passengers?

Record –

Q3 How many of these trips consisted of more than one day of fishing?

Record –

Q4 During the last week (Monday through Sunday), how many additional non-fishing trips did your boat make? Please include any trips taken for fuel, bait, or other recreational activities.

Record –

If Q7>0, go to 4A.

If Q7=0, go to Q5.

Q4A On what days did each of these additional boat trips occur?

Record –

Now that we have information on the All number of trips taken, we would like to obtain specific information about each of these trips. We will begin with the most recent recreational fishing trip and work backwards to last Monday. You reported \_\_\_\_ All trips .

Q5 Did your boat take any saltwater fishing trips that ended on day of week (starting with Sunday)? If “yes”, obtain the All number of trips that day. Repeat this and the following questions for each day of the week. If more than one trip is made in one day, profile each trip separately for that day.

1=Monday

2=Tuesday

3=Wednesday

4=Thursday

5=Friday

6=Saturday

7=Sunday

Q6 How many separate fishing trips did you take on [trip\_date]?

Record –

Q6A Was this trip with paying passengers?

Yes –

No –



- Q7 We are only interested in collecting information about passengers who actively fished by having a line in the water. Excluding captain and crew, how many people actually fished during the trip? (Record number of people on trip.)
- Record –
- Q8 Did this trip return to a [State where vessel was sampled] marina, dock, or launch ramp?
- Yes – Go to Q9
- No – Go to Q8A
- Q8A To what state did your boat return from this trip?
- Record –
- Q9 To what county did this trip return? **(Record FIPS code for county of trip. See FIPS codes in Intercept Survey Training Manual.)**
- Record –
- Q10 Did this trip return to a marina, dock, or launch ramp to which the public normally has access? If so, to what particular marina, dock, or launch ramp did this trip return? **(Record MRFSS 4-digit site code.)**
- 7777=private access site  
8888=unknown public access site  
9999=refused site information
- Q11 At what time (to the nearest half-hour) did your boat leave the dock for that trip? **(Record return time as military time.)**
- Record –
- Q12 At what time (to the nearest half-hour) did your boat return from that trip? **(Record return time as military time.)**
- Record –
- Q13 To the nearest half-hour, how much time was spent actively fishing with gear in the water? **(Record vessel fishing hours. If vessel fishing hours exceed 24 hours record “yes” for multi-day trip and split into individual day trips on consecutive days with equal fishing hours.)**
- Record –
- Q14 What fishing method or methods (read all options) were used on that trip? **(Record as many options as offered.)**
- 1=trolling  
2=bottom fishing  
3=casting

4=fly-fishing  
5=drifting  
6=chunking  
7=chumming  
8=other  
97=don't know  
99=refused

Q15 Was most of your fishing effort on that trip in the ocean, a gulf, a river, a sound, an inlet, or a bay?

1= ocean – Go to Q 15A  
2= sound – Go to Q16  
3= river – Go to Q16  
4= bay – Go to Q16  
5= inlet or other non-ocean water body – Go to Q16

Q15A Was most of your fishing less than or greater than three miles from shore?

1=less than 3 miles  
2=greater than 3 miles

Q16 Did this trip cover more than one day of fishing?

Yes – Go to Q16A.

No – Go to Q17.

Q16A How many days of fishing occurred on this trip?

Record –

Q17 What species were targeted on that trip? That is, when you left the dock, what species were you planning on fishing for? **(Record 10-digit NMFS codes for up to two species or species groups; refer to state or regional short list of species and species groups).**

[26] Other Species  
[98] Don't know/Don't remember  
[99] Refused

## FOLLOW-UP

Q18 Did you receive notification from us that we would contact you for this interview? **If “no”, ask for correct mailing address and briefly explain that notification will be sent prior to any later contacts and continue.**

Yes – Go to Q19

No – Record correct address. Go to Q19

Don't know – Go to Q20

Refused – Go to Q20

Q19 **If Q18 is “yes”, then ask:** Did you choose to use the optional form included with the mailing to record data for the vessel name? **(Record form use.)**

Yes –

No –

Q20 In case the vessel name is ever selected again for this survey, at what time of day would you prefer to be called? **(Record preferred time as military time.)**

Those are all of the questions that I have for you, thank you for your time and cooperation.  
Have a good day/evening. Goodbye.

# Appendix E: For-Hire Survey Logsheet and Instruction

## FOR-HIRE SURVEY LOGSHEET

\* Vessel Name: \_\_\_\_\_  
 \* Vessel Number: \_\_\_\_\_ \* PIN: \_\_\_\_\_

Please fill in oval to the left if the vessel has a current Highly Migratory Species permit.  
 Instructions to fill out the table below are printed on the back of this logsheet.

TRIP #	TRIP SPECIFICS			ORIGIN OF TRIP			EFFORT					FISHING TARGET			
	DATE	DAYS FISHED	TOTAL ANGLERS (no crew)	STATE	COUNTY	SITE NAME	TRIP START TIME	TRIP END TIME	TOTAL HOURS FISHED	FISHING METHOD (Up to 2)		PRIMARY FISHING AREA	DISTANCE FROM SHORE	TARGET SPECIES (Up to 2)	
1										1.	2.			1.	2.
2										1.	2.			1.	2.
3										1.	2.			1.	2.
4										1.	2.			1.	2.
5										1.	2.			1.	2.
6										1.	2.			1.	2.
7										1.	2.			1.	2.
8										1.	2.			1.	2.
9										1.	2.			1.	2.
10										1.	2.			1.	2.
11										1.	2.			1.	2.
12										1.	2.			1.	2.
13										1.	2.			1.	2.
14										1.	2.			1.	2.
15										1.	2.			1.	2.
16										1.	2.			1.	2.

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## INSTRUCTIONS FOR FILLING IN LOGSHEET

- 1) Please record your Vessel Name, Vessel Number, and PIN (from the attached letter) on the logsheet.
- 2) Please fill in the oval on the logsheet if the vessel has a current highly migratory species permit.
- 3) Please use the following codes to complete this form, you may keep it handy for use during your telephone interview, or simply fax it toll-free to **1-877-694-8808**.

### Trip Specifics:

**Date** - The date of the trip (month/day).

**Days Fished** - The number of days on which fishing occurred during the trip. (This will be "1" unless the trip was a multi-day trip).

**Number of Anglers** - The number of people who fished on the trip (excluding captain and crew).

### Origin of Trip:

**State** - The state to which the fishing trip returned (use two letter abbreviation).

**County** - The county to which the fishing trip returned.

**Site Name** - of the marina, dock, or launch ramp to which the trip returned. (If private dock, just record "PRIVATE")

### Effort:

**Trip Start Time** - Time of day vessel departed the dock or ramp for the fishing trip.

**Trip End Time** - Time of day vessel arrived back at the dock or ramp.

**Total Hours Fished** - The amount of time spent actively fishing with gear in the water to the nearest half-hour.

**Fishing Method** - The method of fishing on this trip as defined below. Up to two methods can be entered, with the primary method entered first.

**Trotting (T)** - Lines fished by pulling through the water while under power.

**Bottom (B)** - Lines fished straight down off the side of the boat while typically not under power.

**Casting (C)** - Lines fished by using a casting rod and reel.

**Fly fishing (F)** - Lines fished by using a fly rod and reel.

**Drifting (D)** - Lines fished while boat is passively (not under power) drifting.

**Other (O)**

**Primary Fishing Area:** The primary area of fishing on this trip as:

**Ocean/Gulf (O)** - Fishing in coastal or offshore ocean waters, or the Gulf of Maine.

**Sound (S)** - Fishing in a semi-enclosed or enclosed embayment named "Sound."

**River (R)** - Saltwater fishing in rivers.

**Bay (B)** - Fishing in an enclosed bay (e.g. Chesapeake Bay, Narragansett Bay).

**Distance From Shore** - The distance from shore where fishing primarily took place as defined below.  
Only to be used if Primary Fishing Area = Ocean/Gulf (O).

**≤ 3 miles** - Fishing from shore out to 3 miles.

**> 3 miles** - Fishing greater than 3 miles out from shore.

**Fishing Target** - The fish species or species group targeted during the trip. Up to two targets can be entered, with the primary target entered first.

### Groundfish:

**COD** Atlantic Cod  
**HADD** Haddock  
**SHAK** Silver Hake / Whiting  
**POLL** Pollack  
**HAKE** Hake

### Sharks:

**DGSM** Smooth Dogfish  
**DGSP** Spiny Dogfish  
**SHBL** Blue  
**SHMS** Shortfin Mako  
**SHSB** Sandbar  
**SHTH** Thresher

### Other Pelagics:

**BLUE** Bluefish  
**BON** Bonito  
**MACK** Atlantic Mackerel  
**KOM** King Mackerel  
**SSM** Spanish Mackerel  
**DOL** Dolphin/Mahi-Mahi

### Flounders:

**FLBB** Blackback/Winter Flounder Channel  
**FLSOU** Southern Flounder  
**FLUKE** Summer Flounder/Fluke  
**FLYT** Yellowtail Flounder  
**HAL** Atlantic Halibut

### Other Finfish - Southern:

**BARRA** Great Barracuda  
**COBIA** Cobia  
**CREV** Creville Jack  
**CRO** Atlantic Croaker

### Other Finfish - Northern:

**BSB** Black Sea Bass  
**PERW** White Perch  
**RPG** Red Porgy  
**SCUP** Scup / Porgy  
**SPOT** Spot  
**STB** Striped Bass/Rockfish  
**TAU** Tautog

**DRUMB** Black Drum  
**DRUMR** Red Drum / Redfish  
**GRPR** Unknown Grouper  
**GRPSN** Snowy Grouper  
**LADY** Ladyfish  
**SHEEP** Sheephead  
**SNAP** Snapper Family  
**SNAPR** Red Snapper

**SNAPV** Vermilion Snapper  
**WKSP** Spotted Sea Trout  
**WKSQ** Weakfish/Squeteague/Gray Sea Trout

### Tunas:

**ALB** Albacore  
**BET** Bigeye  
**BFT** Bluefin  
**BLKFT** Blackfin  
**SKJ** Skipjack  
**YFY** Yellowfin

### OTHER:

Write-in